



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,138	02/08/2001	Hirokazu Fujino	0020-4783P	5320

2292 7590 09/22/2003

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

LEO, LEONARD R

ART UNIT	PAPER NUMBER
----------	--------------

3743

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,138

Applicant(s)

FUJINO ET AL

Examiner

Leonard R. Leo

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6, 7 and 9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

The amendment filed June 27, 2003 has been entered. Claim 5 is cancelled, claims 3 and 6-9 are pending, and claims 3 and 8 remain withdrawn.

Claim Rejections - 35 USC § 112

Claims 6-7 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification, as originally filed, fails to provide an adequate written description of the invention. Initially, there is no written support for "regions being serially repeated along a line on said inner surface perpendicular to a pipe axis direction." Furthermore, the term "symmetric" is inconsistent with the claims. Applicants' invention is unclear. Is it the "symmetry" or the "series?"

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al (JP 11-000713)(Figure 2, middle embodiment) in view of Schuez et al.

Yamamoto et al (JP 11-000713) discloses all the claimed limitations except secondary grooves on the projected portions.

Schuez et al discloses a heat-transfer pipe comprising a plurality of grooves 3 and projection portions 2 having a plurality of secondary grooves 5 (Figures 6a-6e) for the purpose of improving heat exchange.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Yamamoto et al (JP 11-000713) secondary grooves for the purpose of improving heat exchange as recognized by Schuez et al.

Regarding claims 6-7, the similar structured device of the combination of Yamamoto et al (JP 11-000713) is believed to be manufactured in a manner similar and similar apparatus as applicants' instant invention as claimed. Figure 1 of Yamamoto et al (JP 11-000713) is particularly pertinent.

Response to Arguments

The rejection under 35 USC 112, first paragraph is maintained. While the claims concur with the drawings and a portion of the specification, the other portion refers to the term "symmetric."

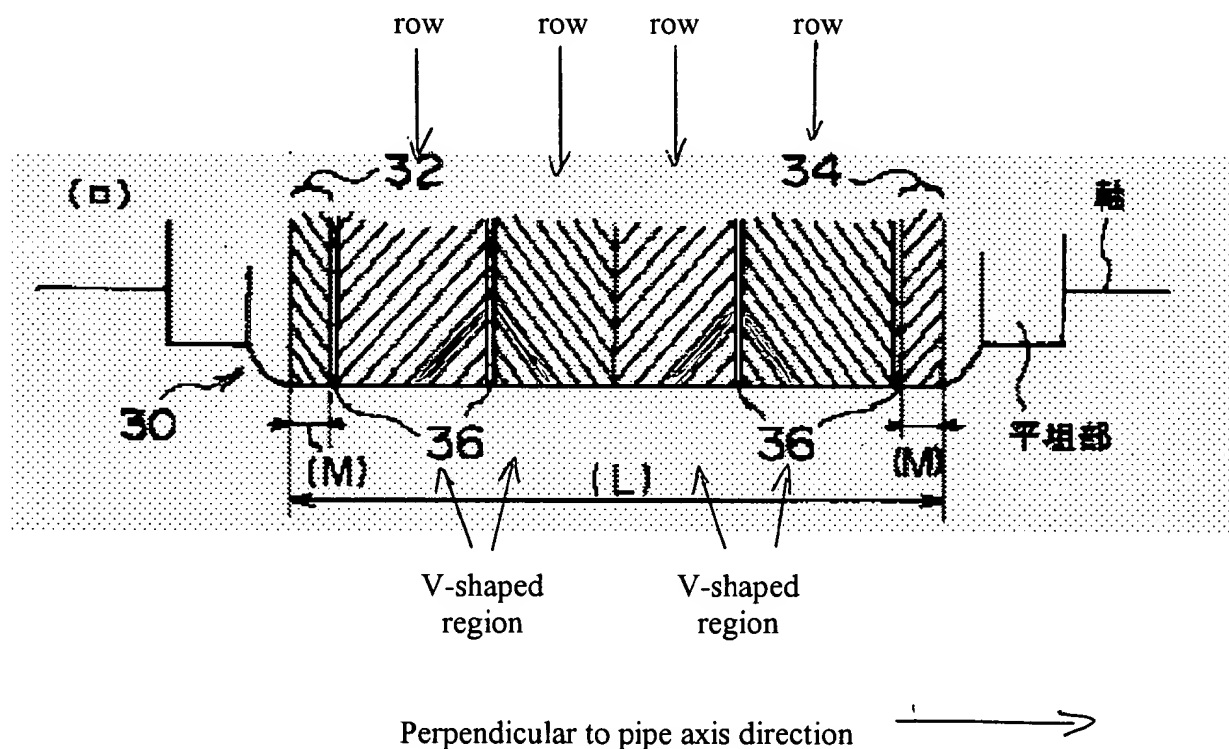
The Examiner regrets any confusion in referencing Ishikawa et al (10-47880) and Takashi et al (JP 11-90530) in the body of the Office action. Ishikawa et al and Takashi et al are clearly not part of the grounds of rejection. The oversights have been corrected.

The Examiner is relying upon the drawings and abstract of Yamamoto et al (JP 11-000713). No translation is readily available. However, the drawings and abstract are believed to clearly teach one of ordinary skill in the art various features of the claimed invention. The burden is upon applicants to show the prior art does not disclose what the Examiner believes Yamamoto et al discloses. It is unclear why applicants are requesting a translation, when

Art Unit: 3743

Japanese is believed to be their native language. If applicants' representative is unfamiliar with the invention or prior art, applicants should be consulted.

Figure 1 of Yamamoto et al discloses a device and method for manufacturing a heat-transfer pipe with internal grooves comprising a first marking roll 30 forming first and second rows of parallel grooves (in red) to forming a series of V-shaped regions (in red, Figure 2 below) repeating along a line on the inner surface perpendicular to the pipe axis direction. Further, the width of the two rows of parallel grooves is different.



The secondary reference of Schuez et al teaches one of ordinary skill in the art to employ a plurality of secondary grooves for the purpose of improving heat exchange. The elements 5 of Schuez et al are grooves and are structurally indistinguishable from the claimed invention. The "grooves" 5 extend from one side surface to the other side surface of the projection 2. Schuez et al discloses the grooves may be employed up to 80 fins per inch, which is read as being "fine."

Art Unit: 3743

Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

No further comments are deemed necessary at this time.

Conclusion

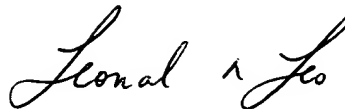
THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: <http://pair.uspto.gov/cgi-bin/final/home.pl>

Art Unit: 3743

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.

A handwritten signature in cursive script that reads "Leonard R. Leo".

LEONARD R. LEO
PRIMARY EXAMINER
ART UNIT 3743

September 20, 2003